

~~timbre of the drum.~~ Another object of the invention is to provide a new and improved drum assembly having an air vent controllable in size to vary the timbre of the drum.

delete the last paragraph and insert the following, amended paragraph:

~~Fig. 1 is an exploded isometric view of a standard drum assembly showing a drum shell with a plurality of acoustic air vent holes midway up the shell, and a ring member positioned inside to vary the size of the air vent openings.~~

Fig. 1 is an exploded isometric view of a standard drum assembly showing a drum shell with a plurality of acoustic air vent holes midway up the shell, and a ring member positioned inside to vary the size of the air vent openings.

Page 3, delete the first paragraph and insert the following, amended paragraph:

~~Fig. 2 is an exploded isometric view of another drum assembly showing a drum shell having a plurality of acoustic air vent holes next to the lower drumhead and a ring member positioned inside to vary the size of the air vent openings.~~

Fig. 2 is an exploded isometric view of another drum assembly showing a drum shell having a plurality of acoustic air vent holes next to the lower drumhead and a ring member positioned inside to vary the size of the air vent openings.

Page 3, delete the last paragraph and insert the following, amended paragraph:

~~Fig. 7 is an isometric view of a standard drum assembly showing a drum shell having one plurality of acoustic air vent holes next to the bottom drumhead, and a drumhead ring having air vent openings, and a pair of ring mem-~~

Fig. 7 is an isometric view of a standard drum assembly showing a drum shell having one plurality of acoustic air vent holes next to the bottom drumhead, and a drumhead ring having air vent openings, and a pair of ring mem-

Page 4, delete the first paragraph and insert the following, amended paragraph:

~~bers positioned inside the shell to vary the size of the air vent openings, and showing a member for using the ring members together.~~

bers positioned inside the shell to vary the size of the air vent openings, and showing a member for using the ring members together.

Page 4, delete the last paragraph and insert the following, amended paragraph:

(text in italics is partially illegible) ~~Fig. 9 is an isometric view of a standard drum assembly showing a drum shell having a plurality of acoustic air vent holes beside to the top drumhead, and disk members rotatable back and forth to vary the size of the air vent openings.~~

Fig. 9 is an isometric view of a standard drum assembly showing a drum shell having a plurality of acoustic air vent holes beside to the top drumhead,

and disk members rotatable back and forth to vary the size of the air vent openings.

Page 5, delete the first paragraph and insert the following, amended paragraph:

~~Fig. 10 is an isometric view of a standard drum assembly showing a drum shell having a plurality of acoustic air vent holes beside to the top drumhead, and slide members slidable up and down to vary the size of the air vent openings.~~

Fig. 10 is an isometric view of a standard drum assembly showing a drum shell having a plurality of acoustic air vent holes beside to the top drumhead, and slide members slidable up and down to vary the size of the air vent openings.

Page 5, delete the last paragraph and insert the following, amended paragraph:

~~A ring member 15 with slots 16, shown exploded above the drum shell, has a sliding fit inside drum shell 13 with slots 16 aligned with slots 14 when fully opened and movable on rotation to a position closing slots 14. Bolts 17,~~

A ring member 15 with slots 16, shown exploded above the drum shell, has a sliding fit inside drum shell 13 with slots 16 aligned with slots 14 when fully opened and movable on rotation to a position closing slots 14. Bolts 17,

Page 6, delete the first paragraph and insert the following, amended paragraph:

~~having square heads operated by a drum key, extend through a pair of slots 14 on opposite sides of the drum shell, and, on tightening, secure ring member 15 in place.~~

having square heads operated by a drum key, extend through a pair of slots 14 on opposite sides of the drum shell, and, on tightening, secure ring member 15 in place.

Page 6, delete the last paragraph and insert the following, amended paragraph:

~~A ring member 25 with slots 26, shown exploded above the drum shell, has a sliding fit inside drum shell 23, with slots 26 aligned with slots 24 when~~

A ring member 25 with slots 26, shown exploded above the drum shell, has a sliding fit inside drum shell 23, with slots 26 aligned with slots 24 when

Page 8, delete the first paragraph and insert the following, amended paragraph:

~~A ring member 35 with slots 36, shown exploded above the drum shell, has a sliding fit outside the drum shell 33. Slots 36 are aligned with slots 34 when fully opened and movable on rotation to a position closing slots 34. Bolts 37, having square heads, worked by a drum key, extend through a pair of slots 34 on opposite sides of the drum shell, and on tightening secure ring member 35 in place.~~

A ring member 35 with slots 36, shown exploded above the drum shell, has a sliding fit outside the drum shell 33. Slots 36 are aligned with slots 34

when fully opened and movable on rotation to a position closing slots 34. Bolts 37, having square heads, worked by a drum key, extend through a pair of slots 34 on opposite sides of the drum shell, and on tightening secure ring member 35 in place.

Page 9, delete the first and second paragraphs and insert the following, amended paragraphs:

~~An imperforate ring member 45, shown exploded above the drum shell, has a sliding fit up and down inside the drum shell 43 to cover and uncover slot 44. Bolts 47, having square heads worked by a drum key, extend through a pair of angled slots 46 on opposite sides of the drum shell, and on tightening secure ring member 45 in place.~~

#### OPERATION

~~With the drumhead secured on the open upper end of drum shell 43, the drum is ready for use. Bolts 47 worked by a drum key move in angled slots 46 to move ring 45 to any needed position between fully open and fully closed. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.~~

An imperforate ring member 45, shown exploded above the drum shell, has a sliding fit up and down inside the drum shell 43 to cover and uncover slots 44. Bolts 47, having square heads worked by a drum key, extend through a pair of angled slots 46 on opposite sides of the drum shell, and on tightening secure ring member 45 in place.

### OPERATION

With the drumhead secured on the open upper end of drum shell 43, the drum is ready for use. Bolts 47 worked by a drum key move in angled slots 46 to move ring 45 to any needed position between fully open and fully closed. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

Page 9, delete the last paragraph and insert the following, amended paragraph:

~~Ring member 54 positioned outside rim 52 may be rotated. Slots 53, 55 are acoustic vent openings matching to the ones in the other examples, which allows air to exit from the interior of the drum. This adjustment of the acoustic~~

Ring member 54 positioned outside rim 52 may be rotated. Slots 53, 55 are allows acoustic vent openings matching to the ones in the other examples, which air to exit from the interior of the drum. This adjustment of the acoustic

Page 10, delete the entire page and insert the following, amended page:  
~~openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.~~

### OPERATION

~~With the drumhead secured on the open upper end of a drum shell, the drum is ready for use. Bolts 57 worked by a drum key move in slots 53 to position member 54 at any needed location of slots 53, 55 between fully open and fully closed. This adjustment of the acoustic openings allows variation in~~

venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

*(Italics indicates Original Text Partially Illegible) Example 6*

Referring to the drawings by numerals of reference, and especially to Fig. 6, shows an upper drum tensioning hoop or ring 61 to be supported on a drum shell as in the other Examples. Ring 61 has a rim 62 with a plurality of acoustic slots 63.

A ring member 64, shown exploded above the drum rim 62, has slots 65, which match slots 63 on assembly and is split at 69. Bolts 66, having square heads 67 worked by a drum key, extend through a pair of the slots 63, 65 on opposite sides of the drum ring member 64. Bolts 66, when extended, are used to rotate ring member 64. A wedge member 68 fits between the ends of split 69, and, on tightening of one of the bolts 66, secures ring member 64 in place.

With ring member 64 positioned inside rim 62, it may be rotated. Slots 63, 65 are acoustic vent openings similar to the ones in the other examples. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response. openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

#### OPERATION

With the drumhead secured on the open upper end of a drum shell, the drum is ready for use. Bolts 57 worked by a drum key move in slots 53 to posi-

tion member 54 at any needed location of slots 53, 55 between fully open and fully closed. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

#### Example 6

Referring to the drawings by numerals of reference, and especially to Fig. 6, shows an upper drum tensioning hoop or ring 61 to be supported on a drum shell as in the other Examples. Ring 61 has a rim 62 with a plurality of acoustic slots 63.

A ring member 64, shown exploded above the drum rim 62, has slots 65, which match slots 63 on assembly and is split at 69. Bolts 66, having square heads 67 worked by a drum key, extend through a pair of the slots 63, 65 on opposite sides of the drum ring member 64. Bolts 66, when extended, are used to rotate ring member 64. A wedge member 68 fits between the ends of split 69, and, on tightening of one of the bolts 66, secures ring member 64 in place.

With ring member 64 positioned inside rim 62, it may be rotated. Slots 63, 65 are acoustic vent openings similar to the ones in the other examples. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

Page 12, delete the entire page and insert the following, amended page: angled slots 73a. Ring members 76 and 77 are imperforate, and have sliding movement toward an end of the drum to cover or uncover slots 73 and 75.



### OPERATION

Lever rods 79 are movable circumferentially in angled slots 73a to rotate ring members 76 and 77, and move them toward and away from an end of the drum shell to cover or uncover slots 73 and 75 to vary the venting of air from the drum and allow air to exit from the interior of the drum. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

### Example 8

Referring to the drawings by numerals of reference, and especially to Figs. 8, 8A, 8B, and 8C, shows a drum assembly 80 with upper and lower drum tensioning rings 81 supported on drum shell 82. Drum tensioning rings 81 are secured on the drum shell 82 by conventional adjusting bolts or screws extending from ring to ring. Adjustment of the bolts or screws varies the tension in the drumhead skin or diaphragm to tune the sound of the drumheads.

Drum shell 82 has a plurality of acoustic vent openings or slots 83 positioned near the lower hoop 81. Upper ring 81 has an upstanding rim 84 with slots 85, (*italics indicates original text partially illegible*) which, together with slots 83, allow air to exit from the interior of the drum.

Split ring members 86 (Fig. 8C) have a coil spring 187 spreading the ring after being inserted for use. Coil spring 187 is fitted over a bolt 186 having a head 185 and washers 184. Ring members 86 have a sliding fit inside drum shell 82 with slots 86a matching slots 83 and 85. Operating levers 87 con

angled slots 73a. Ring members 76 and 77 are imperforate, and have sliding movement toward an end of the drum to cover or uncover slots 73 and 75.

### OPERATION

Lever rods 79 are movable circumferentially in angled slots 73a to rotate ring members 76 and 77, and move them toward and away from an end of the drum shell to cover or uncover slots 73 and 75 to vary the venting of air from the drum and allow air to exit from the interior of the drum. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

### Example 8

Referring to the drawings by numerals of reference, and especially to Figs. 8, 8A, 8B, and 8C, shows a drum assembly 80 with upper and lower drum tensioning rings 81 supported on drum shell 82. Drum tensioning rings 81 are secured on the drum shell 82 by conventional adjusting bolts or screws extending from ring to ring. Adjustment of the bolts or screws varies the tension in the drumhead skin or diaphragm to tune the sound of the drumheads.

Drum shell 82 has a plurality of acoustic vent openings or slots 83 positioned near the lower hoop 81. Upper ring 81 has an upstanding rim 84 with slots 85, which, together with slots 83, allow air to exit from the interior of the drum.

Split ring members 86 (Fig. 8C) have a coil spring 187 spreading the ring after being inserted for use. Coil spring 187 is fitted over a bolt 186 having a head 185 and washers 184. Ring members 86 have a sliding fit inside drum

shell 82 with slots 86a matching slots 83 and 85. Operating levers 87 con

Page 13, delete the entire page and insert the following, amended page:

~~nect d by handle 88, shown in (italics indicates Original Text Partially Illegible) Figs. 8 and 8B, are movable to make the ring slots 86a cover or uncover slots 83 and 85. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and click response.~~

#### OPERATION

~~Handle 88 rotates ring members 86, and moves them to cover or uncover slots 83 and 85 to vary the venting of air from the drum and allows air to exit from the interior of the drum. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and click response. Coil spring 107 keeps ring members 86 expanded inside drum shell 82 and drum ring 84.~~

~~Figs. 9 — 11 show embodiments having individual sliding closures for providing variable air vents for drums.~~

#### Example 9

~~Referring to the drawings by numerals of reference, and especially to Fig. 9 shows a drum assembly 80 with upper and lower drum tensioning hoops 81 and 82 supported on drum shell 83. Conventional adjusting screws secure drum tensioning hoops 81 and 82 on the drum shell 83. Adjustment of the bolts or screws varies the tension in the drumhead skin or diaphragm to tune the sound of the drumheads.~~

~~Drum shell 83 has a plurality of acoustic vent openings 84, which allow air to exit from the interior of the drum. Valve disks 96 are positioned next to each opening 84, and are pivotable side to side to open or close the vent openings. This adjustment of the acoustic openings allows variation in venting of~~  
nected by handle 88, shown in Figs. 8 and 8B, are movable to make the ring slots 86a cover or uncover slots 83 and 85. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

### OPERATION

Handle 88 rotates ring members 86, and moves them to cover or uncover slots 83 and 85 to vary the venting of air from the drum and allows air to exit from the interior of the drum. This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response. Coil spring 187 keeps ring members 86 expanded inside drum shell 82 and drum ring 84.

Figs. 9 – 11 show embodiments having individual sliding closures for providing variable air vents for drums.

### Example 9

Referring to the drawings by numerals of reference, and especially to Fig. 9 shows a drum assembly 90 with upper and lower drum tensioning hoops 91 and 92 supported on drum shell 93. Conventional adjusting screws secure drum-tensioning hoops 91 and 92 on the drum shell 93. Adjustment of the

bolts or screws varies the tension in the drumhead skin or diaphragm to tune the sound of the drumheads.

Drum shell 93 has a plurality of acoustic vent openings 94, which allow air to exit from the interior of the drum. Valve disks 96 are positioned next to each opening 94, and are pivotable side to side to open or close the vent openings. This adjustment of the acoustic openings allows variation in venting of

Page14, delete the first paragraph and insert the following, amended paragraph:

~~air from the drum for (Italics Indicates Original Text Partially Illegible) controlling volume, pitch, tone, timbre, and stick response.~~

air from the drum for controlling volume, pitch, tone, timbre, and stick response.

Page 14, delete the last paragraph and insert the following, amended paragraph:

~~When the drumhead is secured on the open upper end of drum shell 103, the drum is ready for use. Adjustment of the acoustic openings 104 by move-~~

When the drumhead is secured on the open upper end of drum shell 103, the drum is ready for use. Adjustment of the acoustic openings 104 by move-

Page15, delete the first paragraph and insert the following, amended paragraph:

~~ment of valve slides 106 allows a variation in venting of air from the drum. This adjustment of the acoustic openings allows variation in venting of air~~

~~from the drum for controlling volume, pitch, tone, timbre, and stick response.~~

movement of valve slides 106 allows a variation in venting of air from the drum.

This adjustment of the acoustic openings allows variation in venting of air from the drum for controlling volume, pitch, tone, timbre, and stick response.

Page 15, delete the last paragraph and insert the following, amended paragraph:

~~When the drumhead is secured on the open upper end of drum shell 113, the drum is ready for use. Adjustment of the acoustic openings 114 by movement of ring 117 and slides 116 allows a variation in venting of air from the~~

When the drumhead is secured on the open upper end of drum shell 113, the drum is ready for use. Adjustment of the acoustic openings 114 by movement of ring 117 and slides 116 allows a variation in venting of air from the